

SIO Shipyard Representative Bi-Weekly Progress Report		
Project: AGOR 28	Contract No.: N00014-12-C-0305	Shipyard: Dakota Creek Industries
Prepared by: Paul D. Bueren Scripps Institution of Oceanography (SIO) 297 Rosecrans St. San Diego, CA 98106	Date: 1 August, 2013	Program Officer: Robert (Tim) Schnoor Office of Naval Research 875 Randolph St ONR 321 Arlington, VA 22203-1995
Distribution Statement A: Approved for public release; distribution unlimited.		Report No. A002.037

1. Meetings:

- i. Participated in weekly conference call.
- ii. Attended DR10 at Anacortes

2. The following Shipyard Question Submittals were reviewed and commented on:

Q89 – Work and Rescue Boat Motors:

Question: Section 583 of J-1 & and 583a&b of the CSS requires a minimum 40 horsepower 4 stroke SOLAS approved engine to be provided. The only SOLAS approved 40 horsepower engine is a two stroke by Evinrude. DCI is unable to meet both the requirements to be SOLAS approved and a 4 stroke engine for the rescue boat.

DCI recommends relieving the 4 stroke requirement.

Because the specification also calls for the working boat motor to be an identical motor to the rescue boat, DCI recommends relieving the requirements for the motors to be identical for both the working boat and the rescue boat.

The work boat vendor has concerns that the 40 horsepower would not be adequate to reach plane. The rescue boat might actually require 60 or 70 horses, not just 40 horsepower that was required in the specifications.

The yard and government have agreed to the following:

- 1. The Government will accept a rescue boat with a two stroke engine.
- 2. The Government will accept rescue and work boat motors that are not identical so appropriately sized engines can be selected for the work boat.
- 3. Per discussion between Chris Newbert and Rob Hall on 24 July 2013, DCI will select four stroke engines for the workboat adequately powered for the workboat to reach plane.

Q90 - Noise & Vibration Testing:

The Dakota Creek AGOR team reviewed the testing process in order to accomplish the noise FAT for the Propulsion Motor's furnished by Siemens. Early on, ITAR played a critical role scheduling and even the discussion of the logistics of this test, causing the cost to perform these tests in Germany escalate. Once ITAR issues were resolved, the ROM pricing to perform this test was so significant; DCI had to weigh out the benefits of this test versus cost.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 01 AUG 2013		2. REPORT TYPE		3. DATES COVERED 00-00-2013 to 00-00-2013	
4. TITLE AND SUBTITLE AGOR 28				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Scripps Institution of Oceanography (SIO), 297 Rosecrans St., San Diego, CA, 98106				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 10	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

DCI considered 2 facilities in Texas; the concern arose in additional shipment of the sensitive and costly Blue Drives and even the motor itself to that facility, for the procedure. If the drives or motor were to be damaged in transit to Texas or back to Washington this would not only be detrimental to the completion of the AGOR vessel, but a cost setback for DCI's budget to procure another Blue Drive or motor.

Dakota Creek's past experience with Noise FATs of this nature have been to table the results found in a factory setting and to conduct a realistic Noise FAT on the vessel where the equipment is in its actual environment and the resulting data will be based on the characteristics of how the motor will react on the vessel.

We feel it would be a tremendous risk and cost to try to perform this particular test at this time. DCI believes the test would be more beneficial to be executed on the vessel itself. This will ensure the sensitive equipment would have less risk of damage, as well as, the benefit of the measuring acoustic performance based on testing in the actual shipboard configuration.

We are all striving for the construction of a reliable secure and quiet vessel. The cost, risk and potential damage to other equipment would outweigh the minimal benefit of the acoustic testing along with the possible irregularities of the factory environment, at the present time.

NCE & DCI have discussed a solution to conduct these tests in lieu of the Propulsion Motor FAT prior to installation:

Without a Noise FAT, the other tests that will be performed are listed in the order they will occur:

1. Loaded Motor (dockside)
2. Underway vibration (1st possible sea trial)
3. Underway underwater noise

They are also listed in the order in which they provide the best level of information. For test (1) the ship being CPP, can be run at full load with the propellers at 0% pitch which will produce 0% thrust, but with some load. For test (2) NCE will measure in whatever conditions can be provided given that many other agenda items will be needed to be completed. Test (3) will be dedicated to acoustic performance with measurements of motor (and Diesel Generator) foot vibration. For all three tests, NCE will measure vibration in all three orthogonal axes both above and below the vibration isolators.

If these tests result in high vibration or underwater sound, then DCI by direction of NCE can implement noise control treatments that could be incorporated into the ship. One such treatment include: more damping in the way of tiles, to the motor foundation, and motor room aft bulkhead.

A Government response is being developed based on input from reviewers. The consensus is to allow DCI to proceed, but with the understanding that the J1 noise requirements are not to be relaxed. A concise testing and mitigation plan should be provided by DCI.

3. Logistics:

- i. Continuing to review Vendor Recommended Spares (VRS).
- ii. Continuing to review Technical Manuals and Supplemental Information.
- iii. Buy-list In Review
- iv. Continuing to work on initial outfitting lists for Sally Ride.

4. Other Work Items:

- VRS Buy-list – The buy-list has been delayed because it exceeded 1-million dollars for both ship sets and must now undergo an additional review at Bath. There is a minor risk that some of the vendor quotes will expire before this review can be completed. The ACO review board at Bath is expected to meet Tuesday or Wednesday of next week.
- Pilot House Console Face Arrangements – Rev. F was released for review and approved by the operators.
- Ship Stores Refrigeration – Operators are waiting for revised diagrams and calculations from DCI and the vendor. No other information has been provided for this reporting period.
- Sally Ride Mod 1 Stem – Fabrication of the forward bow sub-assembly continues with anchor pocket fabrication.



- Sally Ride Mod 5 – Aft Science and Engine Room Stores bulkheads landed.



Sally Ride Mod 5 1st Platform Deck

- Sally Ride Mod Stern Section Progress



- Portable Panama Chocks – Robust to say the least.



- Sally Ride Pilot House – With the departure of Armstrong's pilot house, work begins in earnest on Sally Ride's. A large amount of prefabricated panels are stacked and ready for installation.



- Sally Ride Stacks – DCI is installing the exhaust piping while the stack is in the horizontal on its erection stand.



- Sally Ride Mod 2 – The following spaces were inspected by ABS & USCG for structure and welds.
 - ✓ State Room Portlight FR42-49
 - ✓ Mess Deck Portlights
 - ✓ Public Head Portlight (room with a view)
 - ✓ Hi-Fog Sprinkler Manhole
- Sally Ride Mod 3 – The following spaces were inspected by ABS & USCG for structure and welds.
 - ✓ Computer Lab
 - ✓ Hospital
 - ✓ Galley
 - ✓ Scullery
 - ✓ Transducer Room Overhead
 - ✓ Void Port
 - ✓ Void Starboard
 - ✓ FO Wing Tanks #2 Port & Starboard
 - ✓ FO Wing Tanks #1 Port & Starboard
- Sally Ride Mod 4 – The following spaces were inspected by ABS & USCG for structure and welds.
 - ✓ ET Shop
 - ✓ Passage Way FR50-57
- No reportable discrepancies were noted by ABS or USCG inspectors. Overall quality of the work is excellent. Small issues with welds are dealt with in a timely manner.

- Neil Armstrong – Observing the running of cables between the switchboards and generator sets with interest. In particular how the cables are passed through the transits and cable trays. At this juncture there are no issues with the work.



5. The following DRL's were reviewed and commented on:

1st App Hull No	DRL No	Document Title	Occur No/Rev No
AGOR27	A024	STD Report - REGULATORY BODY CORRESPONDENCE (USCG GPA Correspondence (Tank Vent Piping Clarification))(R/ASR)	110/0
AGOR27	A024	STD Report - REGULATORY BODY CORRESPONDENCE (ABS GPA Correspondence (Pilothouse Structure Review))(R/ASR)	111/0
AGOR27	A024	STD Report - REGULATORY BODY CORRESPONDENCE (USCG GPA Correspondence (Tank Vent Clarification))(R/ASR)	112/0
AGOR27	A031-04	STD Report - TEST REPORT (DIESEL GENERATOR FAT NCE REPORTS)(R/ASR)	4/1
AGOR27	A035-02	STD Report - SYSTEM DESIGN SCHEDULE (SSV System Design Schedule Rev 11)(R/ASR)	22/0
AGOR27	A024	STD Report - REGULATORY BODY CORRESPONDENCE (ABS GPA CORRESPONDENCE (SUPERSTRUCTURE))(R/ASR)	113/0
AGOR27	A024	STD Report - REGULATORY BODY CORRESPONDENCE (ABS GPA CORRESPONDENCE (PORTABLE CRANE LOADS))(R/ASR)	114/0
AGOR27	A027-34	DWG Report - PAINT SCHEDULE (PAINT SCHEDULE REV 5)(R/ASR)	7/0
AGOR27	A051	STD Report - VENDOR RECOMMENDED SPARES (VRS) LISTINGS, STATISTICS, AND LOCATIONS (PL 72001-06 NR	562/1

		Always On NX-Series UPS)(R/ASR)	
AGOR27	A002	STD Report - DESIGN REVIEW AGENDAS AND MINUTES (NCE DR10 PRESENTATION)(R/ASR)	65/0
AGOR28	A006-08	STD Report - PURCHASE ORDER (PO) INDEX (PO Index 7/19/13)	34/0
AGOR27	A007	STD Report - PURCHASE ORDERS (PO) (PO #72776 BRALEY-GRAY WA)(R/ASR)	659/0
AGOR27	A031-03	STD Report - TEST PROCEDURES (PROCEDURE FOR THE PNUEMATIC PRESSURE TESTING OF PIPING SYSTEMS)(R/ASR)	9/0
AGOR27	A031-03	STD Report - TEST PROCEDURES (PROCEDURE FOR THE PNUEMATIC PRESSURE TESTING OF PIPING SYSTEMS)(R/ASR)	9/1
AGOR27	A055	TM Report - COMMERCIAL TECHNICAL MANUALS AND SUPPLEMENTAL DATA (#206 DI-055 (TM) for 524b Flowserve Uncontaminated SW Pump)(R/ASR)	413/0
AGOR27	A005	STD Report - SINGLE SYSTEM VENDOR (SSV) DESIGN REVIEW AGENDAS AND MINUTES (SIEMENS DR 10 PRESENTATION)(R/ASR - Corresp: 1)	37/0
AGOR27	A007	STD Report - PURCHASE ORDERS (PO) (PO #72765 PLATT ELECTRIC SUPPLY)(R/ASR)	670/0
AGOR27	A007	STD Report - PURCHASE ORDERS (PO) (PO #72790 NOBLE DENTON)(R/ASR)	673/0
AGOR27	A024	STD Report - REGULATORY BODY CORRESPONDENCE (ABS GPA CORRESPONDENCE (PORTABLE CRANE LOADS))(R/ASR)	114/1
AGOR27	A035-02	STD Report - SYSTEM DESIGN SCHEDULE (SSV SCHEDULE REV 12)(R/ASR)	24/0
AGOR27	A035-19	STD Report - SSV FACTORY ACCEPTANCE TEST (FAT) NOTIFICATION (Markey Hydrographic Winch Test)(R/ASR)	35/0
AGOR27	A035-19	STD Report - SSV FACTORY ACCEPTANCE TEST (FAT) NOTIFICATION (Markey Anchor WIndlass Test)(R/ASR)	37/0
AGOR27	A051	STD Report - VENDOR RECOMMENDED SPARES (VRS) LISTINGS, STATISTICS, AND LOCATIONS (DI-051 (VRS) for PL 72008-04 Allied Systems HPU)(R/ASR)	594/0
AGOR27	A051	STD Report - VENDOR RECOMMENDED SPARES (VRS)	598/0

		LISTINGS, STATISTICS, AND LOCATIONS (DI-051 (VRS) for PL 72428-19 Viking Oily Waste Transfer Pump)(R/ASR)	
AGOR27	A051	STD Report - VENDOR RECOMMENDED SPARES (VRS) LISTINGS, STATISTICS, AND LOCATIONS (PL 72428-18 Letter - Viking Fuel Oil Stripping Pump)(R/ASR)	608/0
AGOR27	A055	TM Report - COMMERCIAL TECHNICAL MANUALS AND SUPPLEMENTAL DATA (#204 DI-055 (TM) for 541a Viking Fuel Oil Transfer Pump)(R/ASR)	409/0
AGOR27	A055	TM Report - COMMERCIAL TECHNICAL MANUALS AND SUPPLEMENTAL DATA (#205 DI-055 (TM) for 262 Lube Oil Transfer Pump)(R/ASR)	411/0
AGOR27	A055	TM Report - COMMERCIAL TECHNICAL MANUALS AND SUPPLEMENTAL DATA (#207 DI-055 (TM) for 556b Allied Systems HPU)(R/ASR)	415/0
AGOR28	A007	STD Report - PURCHASE ORDERS (PO) (PO #73523 PLATT ELECTRIC SUPPLY)(R/ASR)	494/0